requested). Table 5-5 identifies the anticipated waste streams that will be generated during HWMA/RCRA closure of the VES-SFE-106 tank system and the identified disposal pathways.

Table 5-5. Anticipated waste streams and disposal pathways.

Waste Stream	Description	Anticipated Waste Characterization	Anticipated Disposal Pathway
Industrial waste	Personal protective equipment/debris (e.g., piping, concrete)	Nonhazardous	INL Site landfill complex
Low-level debris/solids	Personal protective equipment, ancillary piping and equipment, solidified sludge that passes TCLP and LDRs, treated debris that passes clean debris surface inspection (e.g., concrete section of the vault)	Nonhazardous	RWMC
Low-level nondebris/solid	Decontamination residuals and scaling	Nonhazardous	RWMC
Low-level liquid	Decontamination liquids, decontamination residuals, and flush water	Nonhazardous	PEWE or RWMC (after onsite solidification)
Mixed low-level/solids	Personal protective equipment, ancillary piping and equipment, VES-SFE-106 tank and vault, solidified sludge that fails TCLP	HWMA/RCRA hazardous	RCRA-permitted TSDF (e.g., Envirocare of Utah or Chemical Waste Management of the Northwest)
Mixed low-level/liquid	Decontamination liquids, decontamination residuals, and liquid waste characterized as HWMA/RCRA hazardous	HWMA/RCRA hazardous	PEWE or RCRA-permitted TSDF

Waste and waste containers may be stored within the facility during closure activities. A 90-day timeframe is stipulated in IDAPA 58.01.05.006 [40 CFR 262.34(a)(1)] for removal of hazardous waste from the facility to an appropriate storage/disposal facility. Greater than 90-day storage is necessitated by the nature of the wastes being managed (mixed radioactive waste) and the treatment that will be conducted as part of closure activities. A 180-day extension to this timeframe is requested at this time to allow for the consolidation of similar waste streams generated during VES-SFE-106 closure activities; treatment of the hazardous waste removed from the VES-SFE-106 tank system, including dewatering, grouting, verification sampling, and data validation; completing characterization of the various waste matrices for disposal; development of radioactive source terms; sampling and receipt of analytical data from the laboratory; and identification of disposition pathways.

Closure-generated wastes will be placed in appropriate containers and will be managed/treated within the facility. Storage vessels used to accumulate wastes will be secondarily contained. No soils will be managed as waste under this closure plan.

Closure-generated waste may be managed, treated (solids), packaged, and stored within the facility being closed, as defined in this closure plan, provided the following waste management controls are implemented:

- Wastes generated will be managed in containers within the facility
- Containers are compatible with the waste and the containers are closed unless being filled
- Containers are inspected weekly to ensure integrity, and an inspection log is maintained or inspections are logged in the closure logbook
- Containers are clearly marked with hazardous waste labels or with labels identifying the waste as RCRA closure-generated waste to be shipped or characterized, as appropriate
- Spill control equipment is provided adjacent to the container storage area.

For purposes of this closure, the facility will be defined as the areas immediately south and east of Building CPP-603 and the area adjacent to Building CPP-648, as posted. Waste and waste containers may be stored within the facility during closure activities and will be managed in accordance with the requirements of IDAPA 58.01.05.006 (40 CFR 262) (e.g., secondary containment and container compatibility with waste and treatment process) (an extension to the 90-day accumulation period is being requested). Waste and waste containers will be removed from the facility prior to closure certification.

Provisions will be taken, as necessary, during closure to prevent possible failures of the waste containers (e.g., extreme temperature changes). Such provisions may include management of the containers within a temporary enclosure during inclement weather, or other appropriate controls, as determined necessary. Grouting activities will be conducted within a controlled environment meeting applicable RCRA requirements. Once grouted, the containers may be managed within the temporary enclosure, as defined above, until the grout has cured and treatment has been confirmed.

Hazardous waste shipments will be manifested in accordance with the requirements of IDAPA 58.01.05.006 (40 CFR 262, Subpart B) and applicable U.S. Department of Transportation regulations (49 CFR 172, 173, 178, and 179). Such manifest will include the land disposal notification required in IDAPA 58.01.05.011 (40 CFR 268.7).

Piping and ancillary equipment managed as RCRA-contaminated/mixed RCRA-contaminated debris will be removed, sized, and placed in U.S. Department of Transportation-approved waste shipping containers and transported to a RCRA-permitted TSDF for treatment and subsequent disposal. Removal of HWMA/RCRA-regulated piping may necessitate the removal of piping/components that are not subject to closure. Such piping/components will be removed, characterized, and managed in accordance with the HWD. Disposition of such piping shall not be a criterion for closure certification.

Decontamination of piping that will remain in place will be performed iteratively, as necessary, to minimize the volume of waste generated during closure activities. Rinsate solutions generated during decontamination activities will be managed based on a completed HWD.

Information regarding waste management during closure activities will be provided to the independent PE for closure certification and will be maintained as part of the project file.

5.6 Closure Documentation

Closure methods and attainment of the closure performance standards for the VES-SFE-106 tank system will be documented by performing the following:

- Closure activities will be monitored and reviewed by an independent registered PE. Following successful completion of closure activities, the PE will certify that the closure was performed in accordance with the DEQ-approved closure plan.

- Information related to successful implementation of closure activities will be recorded or documented, and provided to the PE, as requested, to support closure certification. Successful demonstration of achieving closure performance standards will require documentation of the following:

  - Waste removal and disposition, including hazardous waste manifests, land disposal restriction notifications, and inspection logs

  - Documentation of the removal, management, and disposition of system components identified in the approved closure plan

  - Validated sampling data and data quality assessment report showing that rinsates, and grouted waste if conducted, meet the site-specific action levels specified in this closure plan

  - Documentation of the integrity testing of buried piping

  - Documentation of the removal, management, and disposition of closure-derived waste.